

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims

- Claim 1. (Currently Amended) A peptide which inhibits T-cell antigen receptor (TCR) function, wherein the peptide is of the following formula:
- R1-X-Z-X-R2 in which
- X is a hydrophobic amino acid or a hydrophobic peptide sequence consisting of between 2 and 6 amino acids,
- Z is a charged amino acid
- R1 is NH₂ and
- R2 is COOH,
- wherein the hydrophobic peptide sequence does not include a charged amino acid, and
- wherein the peptide is at least seven amino acids in length.
- Claim 2. (Canceled)
- Claim 3. (Previously Presented) The peptide according to claim 1 wherein at least 50% of the amino acids which make up the hydrophobic peptide sequence are hydrophobic amino acids.
- Claim 4. (Previously Presented) The peptide according to claim 1 wherein Z is selected from Arg and Lys.
- Claim 5. (Previously Presented). The peptide according to claim 1 which has the formula
- NH₂-Ile-Leu-Leu-Leu-Lys-Val-Ala-Gly-Phe-OH (SEQ ID NO. 6),
- NH₂-Ile-Leu-Leu-Leu-Lys-Val-Ala-Gly-OH (SEQ ID NO. 7),
- NH₂-Leu-Arg-Ile-Leu-Leu-Leu-Gly-Val-OH (SEQ ID NO. 8),
- NH₂-Leu-Gly-Ile-Leu-Leu-Leu-Lys-Val-OH (SEQ ID NO. 9),

NH₂-Ile-Leu-Leu-Gly-Lys-Ala-Thr-Leu-Tyr-OH (SEQ ID NO. 10),
NH₂-Met-Gly-Leu-Arg-Ile-Leu-Leu-Leu-OH (SEQ ID NO. 11), or
NH₂-Leu-Leu-Met-Thr-Leu-Arg-Leu-Trp-Ser-Ser-COOH (SEQ ID NO. 12).

Claim 6. (Previously Presented) The peptide according to claim 1 wherein Z is selected from aspartic acid and glutamic acid.

Claim 7. (Original) A peptide according to claim 6 wherein the peptide has the formula

NH₂-Ile-Ile-Val-Thr-Asp-Val-Ile-Ala-Thr-Leu-OH,
NH₂-Ile-Val-Ile-Val-Asp-Ile-Cys-Ile-Thr-OH, or
NH₂-Phe-Leu-Phe-Ala-Glu-Ile-Val-Ser-Ile-OH.

Claim 8. (Previously Presented) A peptide which inhibits TCR function, wherein the peptide is derived from the TCR- α intracellular chain and comprises the formula:

NH₂-Ala-Gly-Phe-Asn-Leu-Leu-Met-Thr-COOH (SEQ ID NO. 16).

Claim 9. (Withdrawn) A peptide which inhibits TCR function, wherein the peptide is of the following formula:-

R₁-A-B-C-R₂ in which

A is a peptide sequence of between 0 and 5 amino acids;

B is cysteine;

C is a peptide sequence of between 2 to 10 amino acids;

R₁ is NH₂; and

R₂ is COOH.

Claim 10. (Withdrawn) A peptide according to claim 9 wherein A is a peptide sequence comprising 5 amino acids.

- Claim 11. (Withdrawn) A peptide according to claim 9 wherein C is a peptide sequence of 4 or 5 amino acids and includes at least one hydrophobic amino acid.
- Claim 12. (Previously Presented). A peptide which inhibits T-Cell antigen receptor function wherein the peptide has the formula:
- NH₂-Tyr-Gly-Arg-Ala-Asp-Cys-Gly-Ile-Thr-Ser-OH (SEQ ID NO. 17), or
NH₂-Trp-Gly-Arg-Ala-Asp-Cys-Gly-Ile-Thr-Ser-OH (SEQ ID NO. 18), or
NH₂-Tyr-Gly-Arg-Ala-Asp-Cys-Ile-Thr-Ser-OH (SEQ ID NO. 19), or
NH₂-Ser-Ser-Asp-Val-Pro-Cys-Asp-Ala-Thr-Leu-Thr-OH (SEQ ID NO. 20).
- Claim 13. (Previously Presented) A therapeutic composition active against disorders in which T-cells are involved or recruited comprising a peptide as claimed in claim 1 and a pharmaceutically acceptable carrier.
- Claim 14. (Withdrawn) A method of treating a subject suffering from a disorder in which T-cells are involved or recruited, the method including administering to the subject a therapeutically effective amount of the composition as claimed in claim 11.
- Claim 15. (Canceled)